
Installation

MSDL cards are supported on Meridian 1 systems running X11 release 18 and later.

Device number

Before installing MSDL cards, determine which of the devices in the system are available. If all 16 devices are assigned, remove one or more installed cards to replace them with MSDL cards.

Make sure that the device number assigned to the MSDL card is not used by an installed card, even if one is not configured. Use the MSDL planning form, at the end of this section, to assist in configuring MSDL cards.

MSDL interfaces

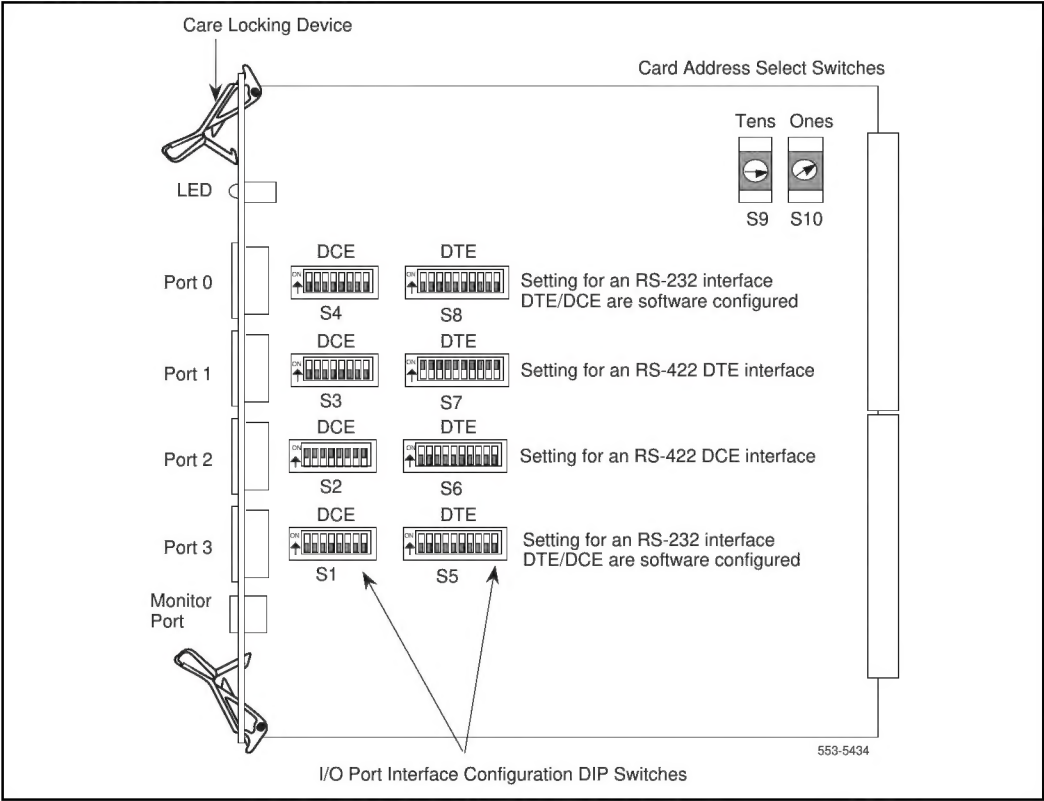
Before installing the cards, select the switch settings that apply to your system, the interfaces, and card addresses.

[Table 8](#) shows the switch positions for the DCE and the DTE interface configurations on the MSDL card. [Figure 5](#) shows the MSDL and the location of configuration switches on the MSDL. The switch settings shown in this figure are an example of the different types of interfaces available. Your system settings may differ. Refer to *Circuit card installation and testing* (553-3001-211) for switch information.

Table 8
MSDL interface switch settings

DCE switch	DTE switch	Interface	Comment
OFF	OFF	RS-232	DTE/DCE is software configured
OFF	ON	RS-422 DTE	All switches configured
ON	OFF	RS-422 DCE	All switches configured
ON	ON	N/A	Not allowed

Figure 5
MSDL switch setting example



Installing the MSDL card

To install an MSDL into the Meridian 1 module, follow these steps:

- 1** Hold the MSDL by its card-locking devices. Squeeze the tabs to unlatch the card locking devices and lift the locking device out and away from the card. Be careful not to touch connector pins, conductor traces, or integrated circuits. Static discharge may damage integrated circuits.
- 2** Insert the MSDL card into the selected card slot of the module following the card guides in the module.
- 3** Slide the MSDL into the module until it engages the backplane connector.
- 4** Push the MSDL firmly into the connector using the locking devices as levers by pushing them toward the card's front panel.
- 5** Push the card-locking devices firmly against the front panel of the card so they latch to the front lip in the module and to the post on the card.
- 6** Observe the red LED on the MSDL faceplate. If it turns on, flashes three times, and stays on continuously, the MSDL is operating correctly but is not yet enabled. Go to step 7.

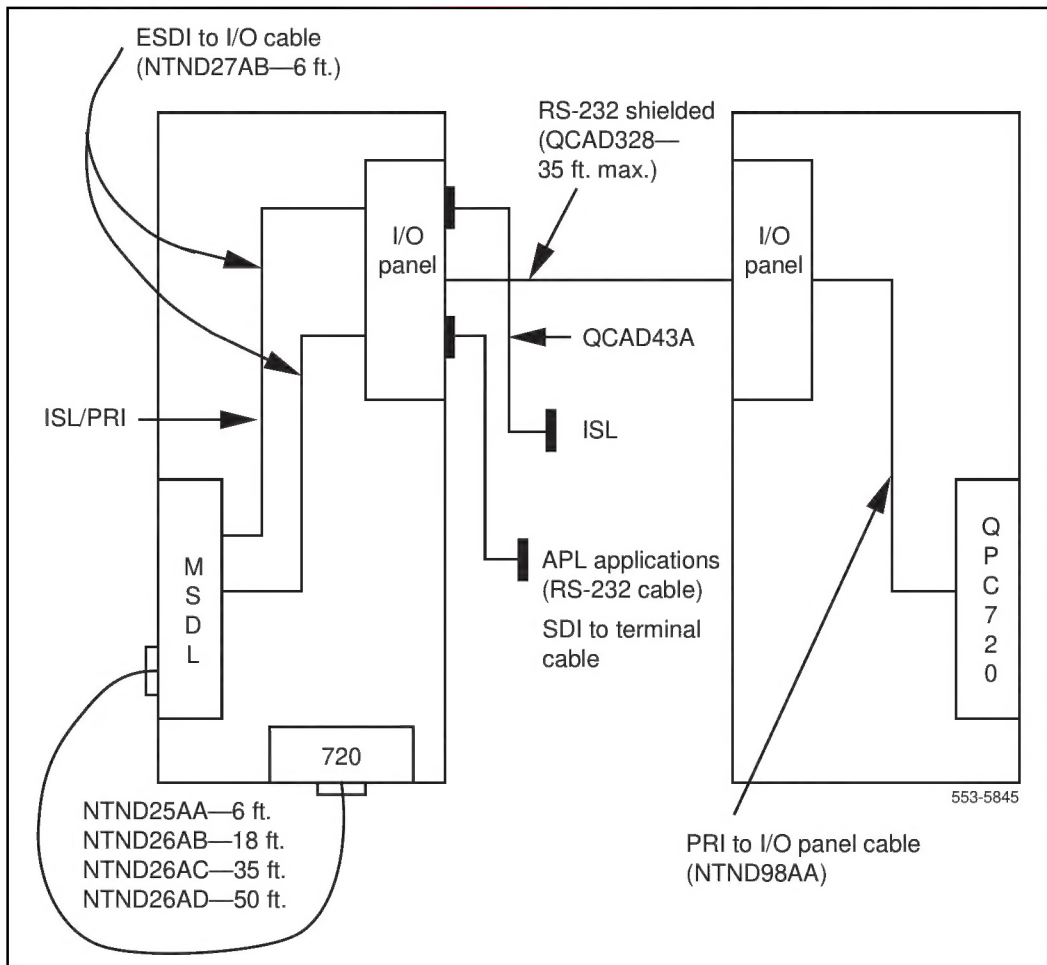
If the LED turns on and stays on continuously without flashing three times, the card may be defective. Go to steps 8 and 9.

- 7** Connect the cables. The installation is complete.
- 8** Unplug the MSDL card and reinsert it. If the red LED still does not flash three times, leave the card installed for approximately 10 minutes to allow the card to be initialized.
- 9** After 10 minutes unplug the card and reinsert it. If the card still does not flash three times, the card is defective and must be replaced.

Cable requirements

The MSDL card includes four high-density 26-pin (SCSI II) female connectors for ports and one 8-pin miniature DIN connector for the monitor port. See [Figure 6](#) for a diagram of the MSDL cabling configuration.

Figure 6
MSDL cabling



A DCH on the MSDL requires a connection from the appropriate MSDL port connector to the DCH connector located on the ISDN PRI trunk faceplate.

Other operations on the MSDL are connected to external devices such as terminals and modems. To complete one of these connections, connect the appropriate I/O connector on the MSDL to a connector on the I/O panel at the back of the module where the MSDL is installed. If a terminal is connected to the regular SDI port, use 8 bit, VT100 terminal emulation. If the terminal is connected to the SDI/STA port with line mode editing, use 8 bit, VT220 terminal emulation.

To determine the type and number of cables required to connect to MSDL cards, you must determine the type of operation you wish to run and select the appropriate cable to connect the operation to the MSDL port. Different types of cables, as described in [Table 9](#), connect the MSDL port to a device.

- NTND26, used to connect the MSDL port to the ISDN PRI trunk connector J5, for DCH
- QCAD328, when cabling between two different columns, that is, I/O to I/O (when MSDL is in one row and QPC720 is in another row)
- NTND98AA (J5 of QPC720 to I/O panel)
- NTND27, used to connect the MSDL port to the I/O panel at the rear of the module, for other interface functions

Table 9
Cable types

Function	Cable type	Cable length
DCH	NTND26AA	6 feet
	NTND26AB	18 feet
	NTND26AC	35 feet
	NTND26AD	50 feet
AML, ISL, SDI	NTND27AB	6 feet

Cable installation

When the MSDL card is installed, connect the cables to the equipment required for the selected operation.

PRI trunk connections

D-channel operations require connections between the MSDL and a PRI trunk card. Refer to *ISDN Primary Rate Interface description and administration* (553-2901-100) for a complete discussion of PRI and D-channels.

The following steps explain the procedure for cable connection:

- 1** Identify the MSDL and the PRI cards to be linked.
- 2** Select the appropriate length cable for the distance between the MSDL and the PRI card.
- 3** Plug the 26-pin SCSI II male connector end of a cable into the appropriate MSDL port.
- 4** Route the cable through cable troughs, if necessary, to the appropriate PRI card.
- 5** Plug the DB15 male connector end of the cable into the J5 DB15 female connector on the PRI card.
- 6** Secure the connections in place with their fasteners.
- 7** Repeat steps 1 through 6 for each connection.

I/O panel connections

Operations aside from PRI require cable connections to the I/O panel. Connections between the I/O panel and Application Equipment Modules (AEM) are described in "Application Module description," *Meridian Link description* (553-3201-110).

The following steps explain the procedure for cable connection:

- 1** Identify the MSDDL card and the I/O panel connector to be linked.
- 2** Using the NTND27AB cable, plug the 26-pin SCSI II male connector end of a cable into the appropriate MSDDL port.
- 3** Route the cable to the rear of the module next to the I/O panel.
- 4** Plug the DB25 male connector end of a cable into a DB25 female connector at the back of the I/O panel.
- 5** Secure cable connectors in place with their fasteners.
- 6** Repeat steps 1 through 5 for each connection.

MSDL planning form

Use the following planning form to help sort and store information concerning the MSDL cards in your system as shown in the sample. Record switch settings for unequipped ports as well as for equipped ports.

MSDL data form					
	Device no.	Shelf	Slot	Card ID	Boot Code version
	Date installed	Last update			
Ports	Operation	Logical no.	Switch setting	Cable no.	Operation information
0					
1					
2					
3					

Sample					
	Device no.	Shelf	Slot	Card ID	Boot Code version
	Date installed	Last update			
Ports	Operation	Logical no.	Switch setting	Cable no.	Operation information
	13	3	5	NT6D80AA-110046	004
	2/1/93	5/5/93			
0	TTY	13	RS-232 DCE	NTND27AB	maint TTY 9600 baud
1	DCH	25	RS-422 DTE	NTND26AB	PRI 27 to hdqtrs
2	AML	3	RS-232 DCE	NTND27AB	Meridian Mail
3	Spare		RS-232		